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February 16, 2005

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APPLICATION NUMBER: 60/536,843

FILING DATE: *January 16, 2004*

RELATED PCT APPLICATION NUMBER: PCT/US05/01665

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PROVISIONAL APPLICATION FOR PATENT COVER SHEET

This is a request for filing a PROVISIONAL APPLICATION FOR PATENT under 37 CFR 1.53(c).

Express Mail Label No. _____

322782 U.S.PTO
60536843

INVENTOR(S)		
Given Name (first and middle if any)	Family Name or Surname	Residence (City and either State or Foreign Country)
William M.	HEYN	Norwalk CT 06854
Additional inventors are being named on the _____		separately numbered sheets attached hereto
TITLE OF THE INVENTION (500 characters max)		
OVERCAP FOR ENHANCING FLEXIBLE LID PERFORMANCE		
Direct all correspondence to: CORRESPONDENCE ADDRESS		
<input checked="" type="checkbox"/> Customer Number: 25628		
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ENCLOSED APPLICATION PARTS (check all that apply)		
<input checked="" type="checkbox"/> Specification Number of Pages 3 _____		<input type="checkbox"/> CD(s), Number _____
<input type="checkbox"/> Drawing(s) Number of Sheets _____		<input type="checkbox"/> Other (specify) _____
Application Data Sheet. See 37 CFR 1.76		
METHOD OF PAYMENT OF FILING FEES FOR THIS PROVISIONAL APPLICATION FOR PATENT		
<input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. <input checked="" type="checkbox"/> A check or money order is enclosed to cover the filing fees. <input checked="" type="checkbox"/> The Director is hereby authorized to charge filing fees or credit any overpayment to Deposit Account Number: 082670 <input type="checkbox"/> Payment by credit card. Form PTO-2038 is attached.		FILING FEE Amount (\$) <div style="border: 1px solid black; padding: 5px; text-align: center;">\$80.00</div>
The invention was made by an agency of the United States Government or under a contract with an agency of the United States Government.		
<input checked="" type="checkbox"/> No. <input type="checkbox"/> Yes, the name of the U.S. Government agency and the Government contract number are: _____		

(Page 1 of 2)

Date January 16, 2004

Respectfully submitted,

SIGNATURE

TYPED or PRINTED NAME William H. Holt

TELEPHONE 703 838 2700

REGISTRATION NO. 20,766

(if appropriate)

Docket Number: Heyn - P2

USE ONLY FOR FILING A PROVISIONAL APPLICATION FOR PATENT
 This collection of information is required by 37 CFR 1.51. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 8 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Provisional Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Docket Number		
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[Page 2 of 2]

Number _____ of _____

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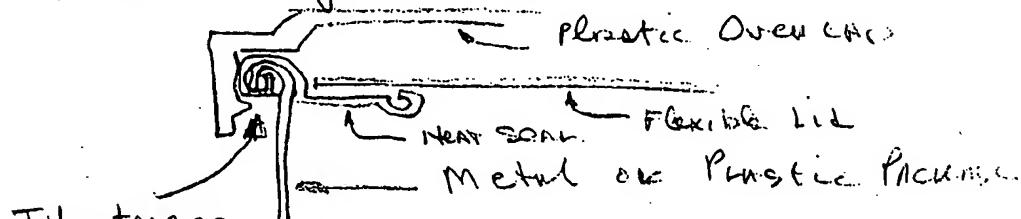
TITLE: OVERCAP DESIGN FOR ENHANCING
Flexible LID PERFORMANCE

William M. HEYN

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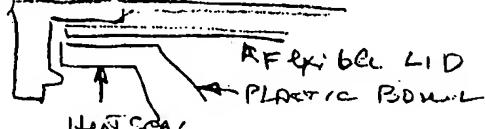
Current Design:

1. Metal Ring + Foil Panel on Plastic or Metal Container

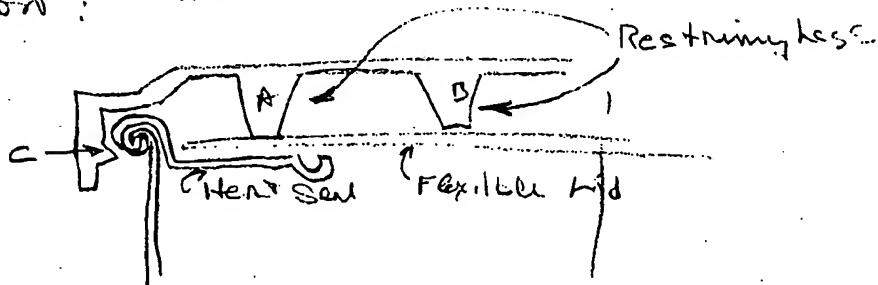


2.

Interference FIT TO SECURE OVCAP

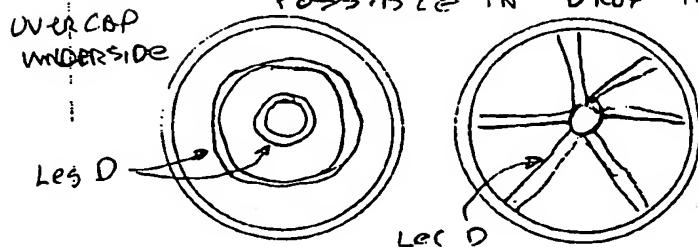


Invention:



- ADDITION OF Restraining leg A to clamp seal (AND)
Retarded opening FROM INTERNAL PRESSURE. Possible
IN DROP IMPACT. Relationship between Leg A + Interference C.
OR/BOTH to set clamp force.

- ADDITION OF RESTRAINING leg B to prevent Flexible
LID FROM moving upward, DURING INTERNAL PRESSURE
POSSIBLE IN DROP IMPACT.

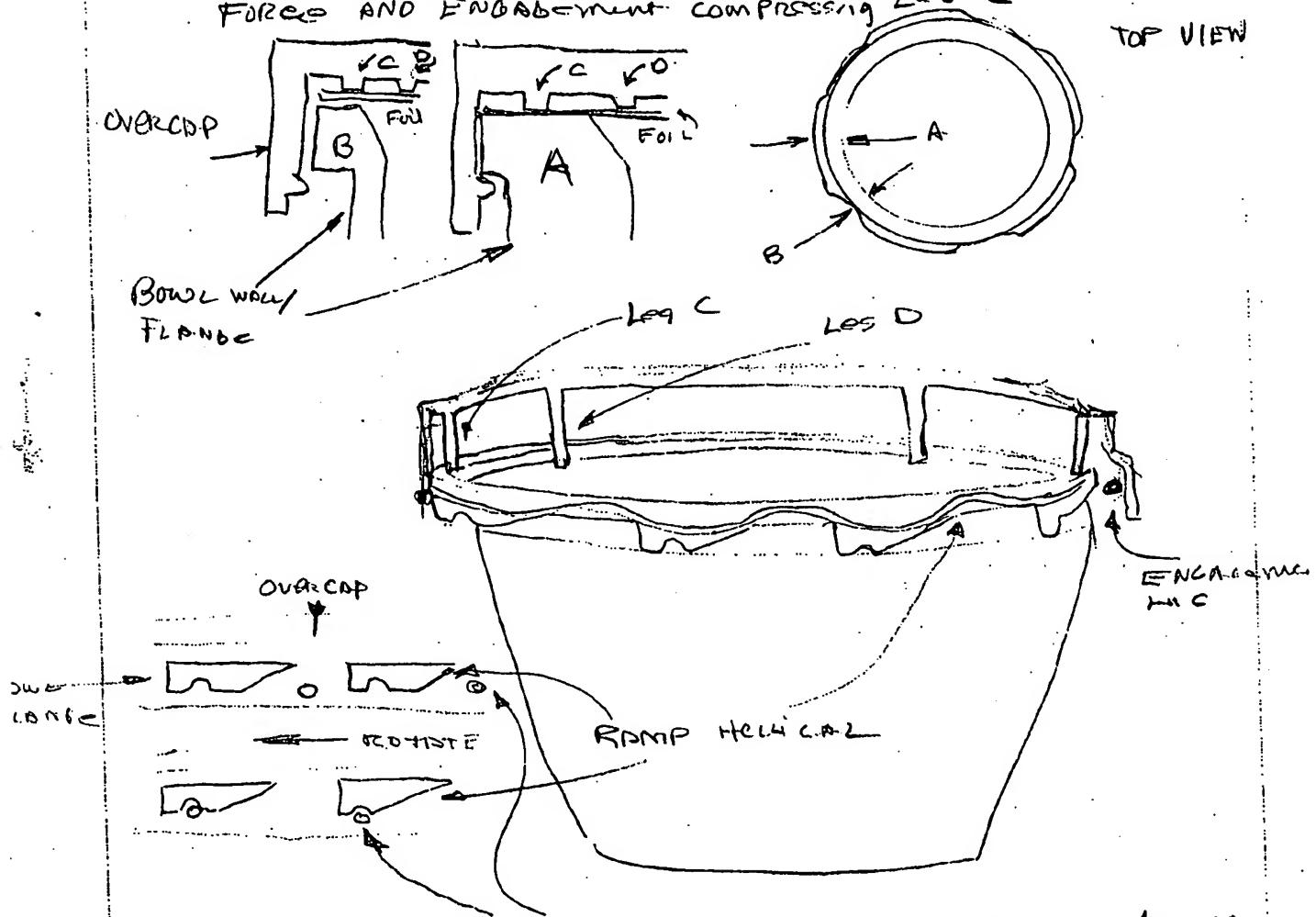


LEG D CAN BE ANY SHAPE TO RESTRAIN THE FLEXIBLE LID, ROUND RING OR RINGS, A CENTRAL PAD OR RADIAL SECTIONS.

PNC 2/3

Rotational Design of Over cap to Create a Clamp

FORCES AND ENGAGEMENT compressing LEG C



1. ROTATIONAL ASSEMBLY OF OVER CAP TO BOWL FLANGE WITH CLAMPING LEG C AND/OR RESTRAINT OF FLEXIBLE FOIL BY LEG D.

2. RAMPED HELICAL AND ENGAGEMENT POCKET + LUGS

- Drawings show LUGS ON LIP + ENGAGEMENT HELICAL ON BOWL.
BUT IT COULD BE REVERSED.
- THREADS COULD BE SUBSTITUTED FOR LUGS + HELICALS

Therefore:

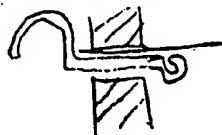
- 1.) Heat Seal must be accomplished in the FLAT AND REFORMED
- 2.) THE FOIL MUST BE CLAMPED CO-INTEGRALLY OR PRIOR TO REFORMING TO AVOID PUNCTURING THE SEAL

THIS CAN BE ACCOMPLISHED IN PROGRESSIVE STATIONS ON THE LIO MANUFACTURING LINE.

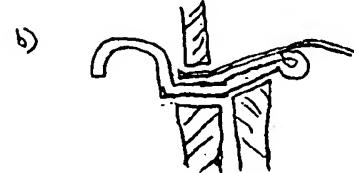
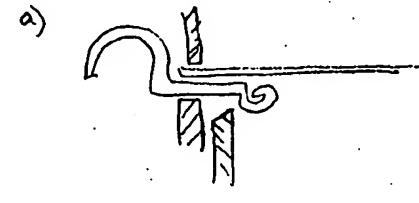
STATION 1. HEAT SEAL

STATION 2 CLAMP FOIL AND REFORM

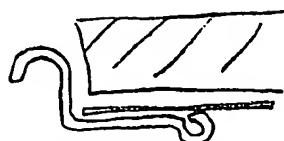
STATION 1.



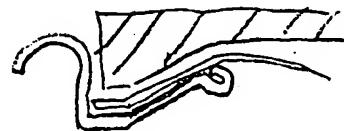
STATION 2



Seaming Chuck:



NORMAL CHUCK



RELIEVED CHUCK

CHUCK MUST BE RELIEVED 360° TO AVOID CRUSHING THE REFORMED SECTION.